HOW THE RAILROADS MAY RENDER MAXIMUM SERVICE

WILLIAM J. CUNNINGHAM
Professor of Transportation, Harvard University

IN this attempt to suggest a partial answer to the question assigned to me for discussion, I have adopted the viewpoint of the near future, assuming that the much-desired business revival is not far distant. Under present conditions of subnormal traffic there is no serious question concerning the ability of the railroads to meet the immediate transportation needs, although the standard of service as a whole is lower than that which should obtain in normal times and the scale of freight rates, dislocated as it is by two substantial war-time horizontal increases, is inequitable in many respects and demands early revision. We are, however, not so much concerned with the immediate present as with the near future when the transportation demands will be much greater and when the capacity of the railroads will perhaps be overtaxed.

It is hardly necessary here to dwell upon the fact that railroad development has been virtually at a standstill since the beginning of the World War. The normal rate of enlargement and improvement in facilities and equipment had been seriously retarded prior to the war when the steady decline in the rate of return on investment prevented the usual income appropriations for betterments and increased the difficulties connected with raising new capital on reasonable terms. It will be recalled that the peak-load of receiverships came in 1915 when about one-sixth of the entire railroad mileage of the country was in the hands of the courts. The additional operating revenues from the large volume of war traffic in 1916 averted the threatened general financial collapse, and the government rentals and guarantees from January 1, 1918, to September 1, 1920, enabled the railroad companies to maintain solvency. Yet, while general bankruptcy was avoided, the program of extension, enlargement and improvement was necessarily limited to emergency needs, and when

the railroads were again entirely on their own resources from September 1, 1920, the arrearage in deferred but necessary investments in betterments was substantial. Little could be done during the last half of 1920, when the volume of traffic exceeded all previous records, and such plans as were then made for execution in 1921 were necessarily abandoned in greater part in 1921 because of the acute business depression and the serious losses in revenues. Notwithstanding the substantial rate increases of 1920 the net railway operating income of 1921 was but little more than one-half of the statutory rate of six per cent contemplated by the Transportation Act as a reasonable return on property value.

Various estimates have been made as to the sum necessary to make up the deferred improvements. It is probably close to the mark to set the amount at $1,000,000,000 per year for five or six years. To this should be added a large sum for deferred maintenance chargeable entirely to operating expenses. This need for large capital expenditures was referred to by Mr. Willard this noon who stated that it would be approximately half a billion dollars a year. Mr. Hines thought it might be as much as one billion. It may be recalled that ten or twelve years ago, the late James J. Hill stated that the railroads needed a billion dollars a year for five years for terminal enlargements. My own view is that the larger figure is that which is justifiable, and that the railroads will need during the next four or five years to spend one billion dollars per year for additions and betterments. One billion dollars a year, related to twenty billion dollars property investment, is an increase of only five per cent a year, so that while the sum itself sounds large, it is not so large relatively.

Considering the fact that the normal growth in ton-miles over a long series of years has been an increase of one hundred per cent every twelve years, and that passenger miles normally double in approximately fifteen years, it is plainly evident that a consistent and continuous program for increasing traffic capacity is imperative. Having in mind also the further fact that relatively little has been done to increase traffic capacity during the past decade, the seriousness of the situation is obvious. It is probably true that the traffic of the fall of 1920 was the greatest load that the existing facilities could stand. Since

then there have been practically no increases in capacity. Indeed the situation with respect to maintenance, particularly as to freight and passenger car equipment, may be less favorable.

If these premises are correct, and I believe that they are, the railroads will have difficulty in rendering satisfactory service when the business revival brings with it a volume of traffic as great or greater than that of two years ago. There is imperative need, therefore, for the expenditure of large sums for additions and betterments. The railroads cannot furnish the maximum of service without such expenditures. The problem then is largely one of finance.

With the passage of the Transportation Act and its constructive rule of rate-making, as well as its recognition of the principle that carriers are entitled to a fair rate of return on property value, and with the rate increase authorized in 1920 by the Interstate Commerce Commission for the purpose of producing a net return of six per cent, it was hoped that substantial progress had been made toward the solution of the financial problem. All calculations, however, were upset by the business depression. Yet it is not proper to interpret the disappointing results of 1921 as an indication that the Transportation Act has failed. Its real test must await a return to normal business conditions. My own opinion is that its inherent soundness will then be demonstrated.

I shall digress, if I may, to show how the law of diminishing returns can easily explain why the railroads under the high freight rates of 1920 were able to earn only one-half of the rate of return contemplated by the Transportation Act. It will be recalled that the increases authorized by the Interstate Commerce Commission were based largely upon estimates made by the railroads, checked and accepted by the Commission. In arriving at those estimates, the amount of the increase was determined by going to the bottom of the income account, and working upward, that is, determining what six per cent on the property value would require, estimating taxes and other items, estimating operating expenses, seeing what the gross operating revenues should be, then finding out how much freight and passenger rates should be increased to bring that gross revenue.

The Interstate Commerce Commission then attempted to set rates so as to bring that estimated amount of operating revenue

which would yield the six per cent contemplated by the Act. It so happened, however, that the volume of traffic upon which the calculation was based was overestimated and some of the expenses were underestimated.

Let us assume that that gross revenue is one hundred and that the operating expenses are seventy, leaving the net operating revenue as thirty. Taxes and charges might be assumed as five and fifteen, respectively, leaving twenty of taxes and charges to come out of the thirty net operating revenue. That would leave ten as a surplus for the payment of dividends or appropriations.

Instead of getting one hundred units of revenue, the railroads got less than eighty. For easy figuring, let us assume that they got eighty. That would be a twenty-per-cent decrease. Expenses could not be reduced twenty per cent with the loss of traffic, because, roughly speaking, only one-half of the expenses will fluctuate with fluctuations in traffic in that degree. If we take that as a basis, one-half of the twenty, or ten per cent, would affect the expenses, bringing the expenses from seventy to sixty-three. The sixty-three expenses, then, would be taken from eighty operating revenues, leaving seventeen net, instead of thirty. From that seventeen, it would be necessary to deduct twenty for taxes and charges, leaving a deficit of three units instead of a surplus of ten. That is a very simple arithmetical demonstration of the profound effect of a loss in traffic because expenses cannot be trimmed to meet the loss in revenue to the same degree in which that loss in revenue occurred, and besides, taxes and other expenses are constant.

That will explain, in greater part, the disappointing results of 1921. It is not an indication of failure of the Transportation Act. It is merely the working of economic laws.

In the meantime how are the railroads to render maximum service? It seems to me that the answer is:

(1) By improvement in management;

(2) By better relations with labor; and

(3) By patience and tolerance on the part of the public.

Without intelligent management, loyal service from employees, and the support of public confidence, satisfactory and economical service is impossible. In whatever degree an im-

provement is brought about in any one or in all of the three fields, in that degree will progress be made toward the attainment of the objective named in the subject of this paper.

Public regulation of railroads may have been carried to extremes and in certain particulars such regulation has worked against the best interests of both the public and the railroad owners, yet such criticism as may fairly be directed against regulation applies to policies followed prior to 1920. The Transportation Act of that year marked a new era in which the regulating authorities are charged with new responsibility for the powers which they may wield. Prior to 1920 the spirit of regulation was mainly corrective and punitive. The new law, while continuing the powers of correction and punishment, also recognizes the fact that the prosperity of railroads is essential to satisfactory public service and it directs the regulating bodies to exercise their authority so that consideration shall be given, among other things, to the transportation needs of the country and the necessity of enlarging transportation facilities " in order to provide the people of the United States with adequate transportation."

In return for this public recognition of responsibility and partnership in adequate net earning power, railroad managers should whole-heartedly accept all of the obligations which the Act imposes upon them. In the first place there is the obligation to operate the properties honestly, efficiently and economically. In the second place there is the obligation to recognize the fact that the principle of railroad consolidation is a vital part of the new rate-making rule. A selfish attitude on the part of individual roads in opposing progress toward the elimination of the troublesome factor of the weak road, should not be allowed to wreck the most important feature of the new law. I am sorry here to disagree somewhat with Mr. Willard, who, while believing in the principle of consolidation, regards it as not vitally important. It seems to me that it is a vital part of the successful working of the rate-making rule, inasmuch as it is only by consolidation that the so-called weak roads can be strengthened, by being absorbed by the stronger roads. In the third place, there should be a more receptive attitude toward really constructive measures which look toward unification of facilities and pooling of freight equipment. All

such proposals have their defects, some of them serious, but when a plan such as that of common ownership and control of freight cars is so obviously advantageous in principle, an effort should be made to make it workable rather than to block progress by condemning the whole because of a defect in a part.

The railroads as a whole quite properly protest against the efforts of those who support the Capper Bill which would eliminate the rate-making provision of the Transportation Act, yet a few of the railroads will just as surely destroy the effectiveness of the law by attacking the principle of recapture of excess earnings, or by appealing to the courts to overthrow the decision of the Interstate Commerce Commission in a recent important case affecting the division of revenues on joint traffic. The best interests of the railroads as well as those of the public will be served by a whole-hearted acceptance of every part of the Transportation Act to the end that it may have a fair trial under normal conditions.

Finally, the railroads as a whole should agree upon and make effective a fair and enlightened policy toward labor, recognizing the joint partnership in an ungrudging spirit and without antagonism against unions as such. The Transportation Act provides the necessary machinery for the restoration of amicable relations. The responsibility for the failure to get together on important principles cannot be charged entirely to management but it must assume a share. The fear on the part of the unions that some railroads are attempting to use the present opportunity to disrupt their organizations has a very disturbing influence. Economical operation and maximum transportation capacity are impossible while labor relations are strained beyond the legitimate and natural degree of difference in the respective viewpoints of employer and employed.

But the remedy is not wholly in the hands of management. The public has a right to demand that employees shall recognize the relation between loyal and efficient service and economical and satisfactory transportation. Misled by their leaders, an increasingly large proportion of employees believe that railroad management as a whole is corrupt, and their resistance to the inevitable deflation in war-time wage rates and restrictive rules is carried to an extreme which, while aimed

at management, disregards public interests in the restoration of normal conditions. Just as railroad managers as a whole must recognize their obligations as the operating heads of public utilities, so must the labor leaders and the union membership be brought to a realization of the fact that they too are amenable to the bar of public opinion. The obligation of the railroad managers to pay fair wages is no greater than that of the employees to work efficiently.

Finally we come to the obligations of the general public. When Congress, in 1919, considered the many plans for the solution of the railroad problem, it responded to an overwhelming public sentiment by rejecting all proposals looking toward government ownership or operation in any form. Public opinion was unmistakably in favor of a return to the initiative and competition of private ownership and management. The passage of the Transportation Act appeared to wipe the slate clean of public resentment and antagonism because of past abuses and mismanagement, and the railroads were returned to their owners with an encouraging degree of public confidence.

Principally because of the disturbing effects of the business depression and the burden of war-inflated freight rates, a large part of the public confidence in railroads has changed into an attitude of criticism and distrust. Much of the criticism is the result of misunderstanding. It is commonly believed that the railroads are working under a guarantee from the government and that they are not accepting their fair share of the pains of post-war deflation. The effect of freight rates upon the cost of living and upon the marketing of commodities has been unfairly magnified, and the atmosphere is befogged by professional propagandists with a mixture of sophistry, half-truth and misstatement.

If we are to find a way out of the dilemma short of government ownership it can only be by the exercise of patience and tolerance on the part of the public. They must give the railroads time to adjust their costs to changed conditions and to put their house in order for the hoped-for better times and bigger traffic. The public must exercise moderation and temperance in their demands for rate reductions. Just now each group of shippers is insisting that the rates in which it is interested must come down at once without regard to the effect

upon railroad net income and service. Notwithstanding the fact that the present rate scale is yielding only slightly more than three per cent on property value, certain interests are intent upon cutting the heart out of the Transportation Act by repealing its rate-making clause, and upsetting the equilibrium by curtailing the power of the Interstate Commerce Commission over state rates.

Unless the public will refrain from encouraging Congress to tinker with the existing laws, and from bringing political pressure to bear upon the Interstate Commerce Commission to make wholesale downward rate adjustments while the railroads are barely able to pay taxes and charges, there can be little progress made in putting the transportation machine in order for the heavy traffic load which will probably soon be in sight.

Patience and tolerance, and a reasonable degree of confidence in the integrity of railroad management, will serve the real and long-time interests of the public much better than impatience, intolerance and distrust. Adequate service and a factor of safety in traffic-carrying capacity are more important than low rates. An insistence upon rates which are unremunerative will work against the rehabilitation of the railroad properties, prevent the making-up of deferred maintenance and effectually block the flow of income and new capital into imperatively needed and long-delayed improvements and enlargements.